



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,973	06/10/2004	Andrew Scott Argersinger	GEMS 0242 PUS	3972

27256 7590 05/29/2008
Dickinson Wright PLLC
38525 Woodward Avenue
Suite 2000
Bloomfield Hills, MI 48304

EXAMINER

RAMIREZ, JOHN FERNANDO

ART UNIT	PAPER NUMBER
----------	--------------

3737

MAIL DATE	DELIVERY MODE
-----------	---------------

05/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/709,973	Applicant(s) ARGERSINGER ET AL.	
	Examiner JOHN F. RAMIREZ	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-13, 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments, see remarks, filed 02/29/08, with respect to the 35 USC § 112 rejection have been fully considered and are persuasive. Therefore claims 1-4, 7-13 and 16-20 rejected under section 112 first paragraph has been withdrawn. However, in relation to applicant's argument that none of the references teaches the removal of a non-radiolucent heating element automatically prior to image signal generation.

The examiner of record disagrees with applicant's assertions, since the Klawitter et al. reference teach in col. 3, lines 25-38 of the specifications the use of a heat conductive plates adapted to be remove from the bucky table of the mammography machine. Klawitter also discloses that the heating material can be used with a heat conductive metal to improve its heat conduction properties to heat the surface. It is well known that metal is radiopaque to x-rays which produces artifacts in the x-rays taken. Therefore, it would be obvious to remove the non-radiolucent material such as metal before imaging in order to avoid artifacts that diminish the usefulness of the developed x-ray picture.

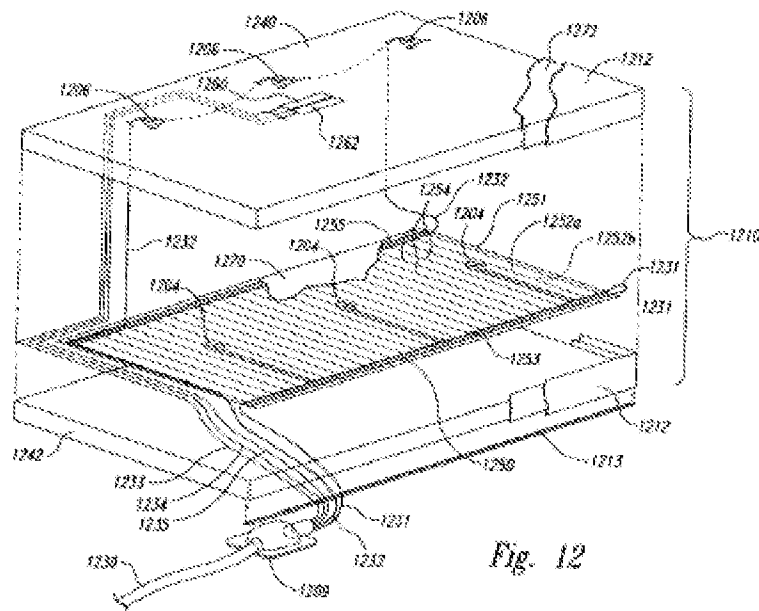
In addition, the replacement of a manual operation with an automatic operation is a design consideration within the skill of the art. In re Venner, 262 F.2d 91, 120 USPQ 192 (CCPA 1955).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8, 11-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klawitter et al. (US 5,081,657) in view of Wyatt et al. (US 6,967,309).



The Klawitter et al. patent shows in figures 1 and 2, and in col. 3, lines 25-38 of the specifications the use of a heat conductive plates adapted to be remove from the bucky table of the mammography machine. Klawitter also discloses that the heating material can be used with a heat conductive metal to improve its heat conduction

properties to heat the surface. It is well known that metal is radiopaque to x-rays which produces artifacts in the x-rays taken. Therefore, it would be obvious to remove the non-radiolucent material such as metal before imaging in order to avoid image artifacts. Whether the removal of such material is done manually or automatically is a design consideration within the skill of the artisans.

Klawitter et al. does not specifically mention that there is a thermo sensor assembly positioned to monitor temperature at the patient exposure surface, a logic that is in communication with the thermo sensor assembly and the thermo generating element, and said logic adapted to remove power from the thermo generating element.

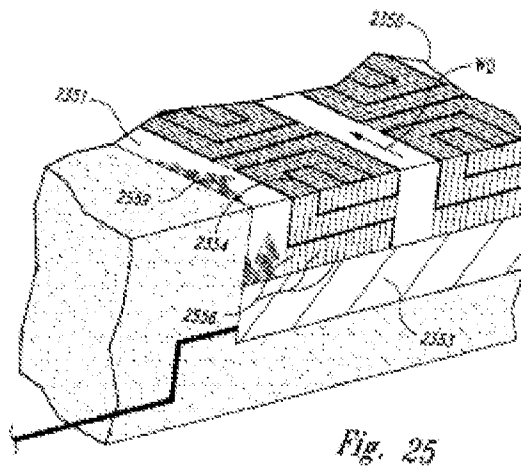
However, a thermo sensor assembly positioned outside the imaging region to monitor temperature at the patient exposure surface, a logic that is in communication with the thermo sensor assembly and the thermo generating element, and said logic adapted to remove power from the thermo generating element is considered conventional in the art as evidenced by the teachings of Wyatt et al.

The Wyatt et al. patent teaches, a thermo sensor assembly positioned to monitor temperature at the patient exposure surface, a logic (fig. 1,120) that is in communication with the thermo sensor (fig. 12,1260, 1262) assembly and the thermo generating element (fig. 12, 1250), and said logic (fig. 1, 120) adapted to remove power from the thermo generating element (col. 18, lines 27-46).

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Klawitter et al., with the above discussed enhancements would have been considered obvious because such modifications would

have enhanced to control the temperature of the heating pad at the patient exposure surface when it exceeds the temperature selected by the operator.

Claims 9, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klawitter et al. in view of Wyatt et al. (US 6,967,309).



Klawitter et al., teaches all the limitations of the claimed subject matter as applied to claims 1, 8 and 18 above, except for mentioning specifically a thermo generating element that comprises: a heater array comprising a conductive polymer coating bonded to a film base and a protective film layer laminated to said film base, and wherein said conductive polymer coating comprises carbon flakes and a polymer.

However, a thermo generating element that comprises: a heater array comprising a conductive polymer coating bonded to a film base and a protective film layer laminated to said film base, and wherein said conductive polymer coating comprises carbon flakes and a polymer is considered conventional in the art as evidenced by the teachings of Wyatt et al.

The Wyatt et al. patent Shows in figures, 24A-D, a thermo generating element that comprises: a heater array (see Fig. 25) comprising a conductive polymer coating bonded to a film (col. 35, line 33-45) base and a protective film layer laminated to said film base, and wherein said conductive polymer coating comprises carbon flakes and a polymer.

Based on the above observations, for a person of ordinary skill in the art, modifying the method disclosed by Klawitter et al., with the above discussed enhancements would have been considered obvious because such modifications would have enhanced the diagnostic system by using a carbon-filled polymer heating element that is radiolucent. As a result, it will not obscure or otherwise impair x-ray images taken of a patient positioned on the heating pad.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN F. RAMIREZ whose telephone number is (571)272-8685. The examiner can normally be reached on (Mon-Fri) 7:00 - 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3737

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian L Casler/
Supervisory Patent Examiner, Art
Unit 3737

/J. F. R./
Examiner, Art Unit 3737